2)

```
jake@pop-os:~/Documents/Schoolwork/MATH415/Code/Homework3$ ./a.out
Enter the coefficient of X: 65537
Enter the coefficient of Y: 35117
Enter the sum: 1
The solution is
x = -11282
y = 21055
jake@pop-os:~/Documents/Schoolwork/MATH415/Code/Homework3$ ./a.out
Enter the coefficient of X: 65537
Enter the coefficient of Y: 35117
Enter the sum: 17
The solution is
x = 4811
y = -8978
```

3)

```
jake@pop-os:~/Documents/Schoolwork/MATH415/Code/Homework3$ ./a.out
Enter base number: 3
Enter exponent: 1234567
Enter number of digits: 5
Result: 08875
```

5)

```
The solutions are:
48
149
250
351
452
553
```